Panasonic®

Color Television

Operating Instructions

Read these instructions completely before operating this set.

Contents subject to change without notice or obligation.

Printed in U.S.A.

TQB2A0817

Downloaded from www.Manualslib.com manuals search engine

Safety Instructions

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: To reduce the risk of electric shock do not remove cover or back. No user–serviceable parts inside. Refer servicing to qualified service personnel.

The lightning flash with arrow–head within a triangle is intended to tell the user that parts inside the product are a risk of electric shock to persons.

The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the papers with the appliance.

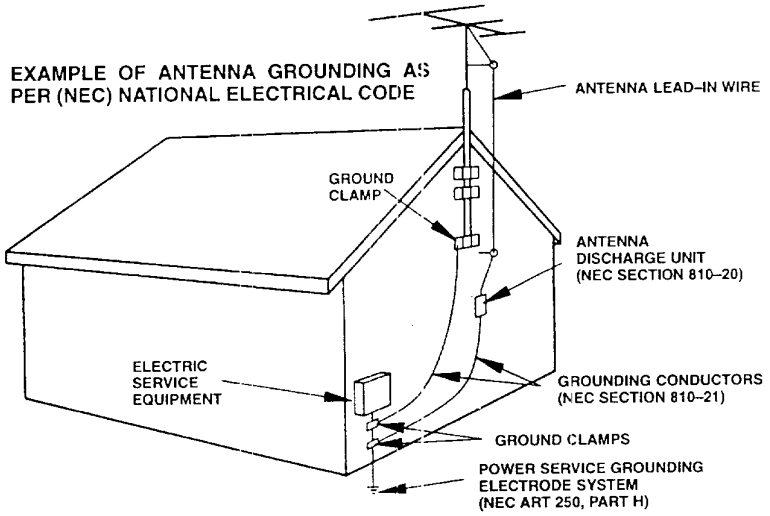
Note To CATV System Installer: This reminder is provided to call the CATV system installer's attention to Article 820–40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Safety Instructions For Television Receivers

1. Read and apply the operating instructions provided with your television receiver.
2. Read all of the instructions given here and retain them for later use.
3. Unplug this television receiver from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
4. Do not use attachments not recommended by the television receiver manufacturer as they may cause hazards.
5. Do not use this television receiver near water. For example: Avoid placing it near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.
6. Do not place this television receiver on an unstable cart, stand, or table. The television receiver may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the television receiver. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.

6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Slots and openings in the cabinet and the back or bottom are provided for ventilation, and to insure reliable operation of the television receiver and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the television receiver on a bed, sofa, rug, or other similar surface. This television receiver should never be placed near or over a radiator or heat register. This television receiver should not be placed in a built–in installation such as a bookcase unless proper ventilation is provided.
8. Operate only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home consult your television dealer or local power company. For television receivers designed to operate from battery power, refer to the operating instructions.
9. This television receiver is equipped with a polarized alternating–current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way.This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
10. Do not allow anything to rest on the power cord. Do not locate this television receiver where the cord will be abused by persons walking on it.
11. Follow all warnings and instructions marked on the television receiver.
12. Do not overload wall outlets and extension cords as this can result in fire or electric shock.
13. Never push objects of any kind into this television receiver through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the television receiver.


EXAMPLE OF ANTENNA GROUNDING AS PER (NEC) NATIONAL ELECTRICAL CODE
ANTENNA LEAD–IN WIRE
GROUND CLAMP
ANTENNA DISCHARGE UNIT (NEC SECTION 810–20)
ELECTRIC SERVICE EQUIPMENT
GROUNDING CONDUCTORS (NEC SECTION 810–21)
GROUND CLAMPS
POWER SERVICE GROUNDING ELECTRODE SYSTEM (NEC ART 250, PART H)

Downloaded from www.Manualslib.com manuals search engine

14. If an outside antenna is connected to the television equipment, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. In the U.S. Section 810 of the National Electrical Code and in Canada Part 1 of the Canadian Electrical Code provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead–in wire to an antenna discharge unit, size of grounding conductors, location of antenna–discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure.
15. For added protection for this television receiver during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage to the receiver due to lightning and power–line surges.
16. An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.
17. Unplug this television receiver from the wall outlet, and refer servicing to qualified service personnel under the following conditions:
    a. When the power cord or plug is damaged or frayed.
    b. If liquid has been spilled into the television receiver.
    c. If the television receiver has been exposed to rain or water.
    d. If the television receiver does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the television receiver to normal operation.
    e. If the television receiver has been dropped or the cabinet has been damaged.
    f. When the television receiver exhibits a distinct change in performance – this indicates a need for service.
18. Do not attempt to service this television receiver yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
19. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
20. Upon completion of any service or repairs to this television receiver, ask the service technician to perform routine safety checks to determine that the television is in safe operating condition.
21. **WARNING: To prevent fire or shock hazard, do not expose this appliance to rain or moisture.**
22. **CAUTION:** TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NOTE: This equipment is designed to operate in the U.S.A., Canada and other countries where the broadcasting system and AC house current is exactly the same as in the U.S.A. and Canada.

Important Information Regarding Use of Video Games, Computers, Teletext or Other Fixed Image Displays.

The extended use of fixed image program material can cause a permanent "shadow image" on the picture tube. This background image is viewable on normal programs in the form of a stationary fixed image. This type of irreversible picture tube deterioration can be limited by observing the following steps:

A. Reduce the brightness/contrast setting to a minimum viewing level.
B. Do not display the fixed image for extended periods of time.
C. Turn the power off when not in actual use.

NOTE: The marking or retained image on the picture tube resulting from fixed image use is not an operating defect and as such is not covered by Warranty. This product is not designed to display fixed image patterns for extended periods of time.

Specifications

Power Source:	120V 60Hz, AC
Channel Capability:	155 channels (See chart) VHF 2~13, UHF 14~69 Cable 99 channels

Specifications are subject to change without notice or obligation.

Channel Capability Chart

BAND	USA/CAN
VHF	12
UHF	56
CABLE (Mid–Band)	15
CABLE (Super Band)	14
CABLE (Hyper Band)	28
CABLE (Ultra Band)	30
TOTAL CHANNELS	**155**

Downloaded from www.Manualslib.com manuals search engine

Introduction

Congratulations on Your New Purchase

Your new video component features an all solid state chassis which is designed to give you many years of enjoyment. It was thoroughly tested and adjusted at the factory for best performance.

In order for you to take full advantage of your new video component, please read and follow the installation and operating instructions supplied with this product.

Customer's Record

The model and serial number of this product may be found on its back cover. You should note the model and serial number in the space provided and retain this book as a permanent record of your purchase to aid in identification in the event of theft or loss.

Model Number: _____ Serial Number: _____

Table of Contents

Safety Instructions **2**
Specifications **3**
Introduction **4**
Installation **4**
Antenna Connection 5
Battery Installation 5
Location of Controls **6**
Quick Reference Control Operation 6
Control Operation **7**
Power Button 7
Vol (Volume) Buttons 7
Level (+) & (–) Buttons 7
Ch (Channel) Buttons 7
Set Up Button 7
Auto Channel Programming 8
Add/Erase Channels 8
Tuning System Antenna/Cable 8
Set Clock 8
Video Button 9
Color 9
Tint 9
Brightness 9
Picture 9
Sharpness 9
Norm (Normalize) Button 9
R–Tune (Rapid Tune) Button 9
On Timer Button 10
Sleep Button 11
Recall Button 11
Channel Keyboard "0 through 9" Buttons 11
Mute Button 11
Skip Button 11
Menu Button 12
Earphone Jack 12
Care & Cleaning **13**
Troubleshooting Chart **14**

Installation

Location

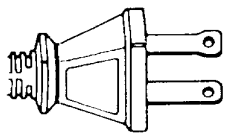
Locate for comfortable viewing. Avoid placing where sunlight or other bright light (including reflections) will fall on the screen.

Adequate ventilation is essential to prevent internal component failure. Keep away from areas of excessive heat or moisture. Do not position magnetic equipment (motors, fans, other speakers, etc.) nearby.

AC Power Supply Cord

Insert (Polarized) plug into 120 volts 60Hz standard AC outlet. Do not defeat the safety purpose of the polarized plug.

CAUTION: TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADE CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.



Polarized Plug

Downloaded from www.Manualslib.com manuals search engine

Antenna Connection

How to Install VHF/UHF Rod Antenna

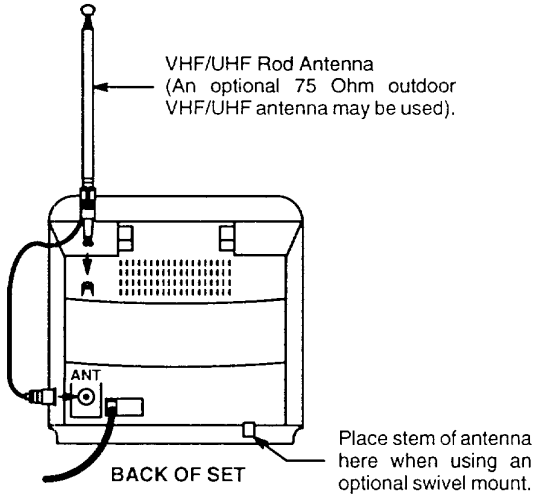
A VHF/UHF rod antenna is supplied.
Push the stem of the VHF/UHF antenna into the antenna hole on the cabinet back as shown.
Extend the antenna and adjust its length, direction and angle for the clearest picture.

Outdoor VHF/UHF Antenna – Reception is best with a properly installed outdoor antenna, particularly in weak signal areas. Contact your Dealer or Service Technician for recommendations of antennas best suited for your area when required. Connect antenna as shown in one of the drawings.

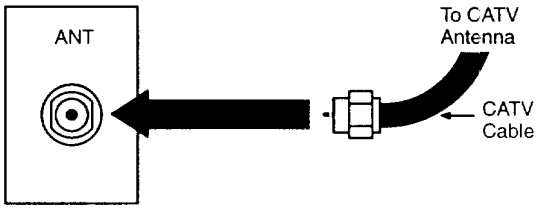
Cable TV Connection

You are capable of receiving channels from general types of cable TV systems. Certain cable systems offset some channels to reduce interference or have Premium (scrambled) channels, so a cable converter box is required. To ensure proper installation and reception, check with your local cable company for its compatibility requirements.

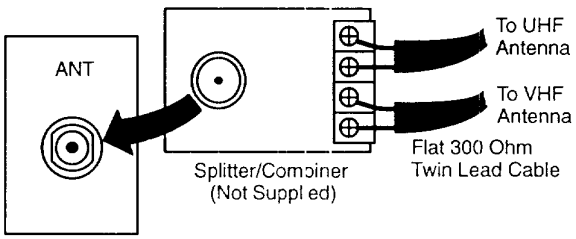
Antenna Connections Using Combined VHF & UHF 75 Ohm Lead Cable


VHF/UHF Rod Antenna
(An optional 75 Ohm outdoor VHF/UHF antenna may be used).
ANT
BACK OF SET
Place stem of antenna here when using an optional swivel mount.

CATV (Cable) Antenna Connection



Antenna Connection Using Individual VHF & UHF Flat 300 Ohm Twin Lead Cables



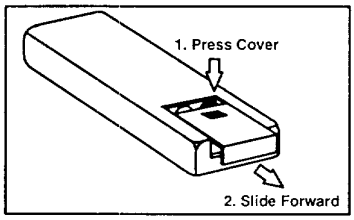
Other Video Accessories

VCRs, Video Disc Players, Computers, TV games, and Teletext equipment can also be connected to the antenna connection.

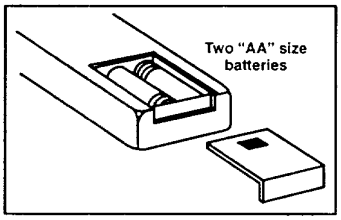
Remote Control Battery Installation & Replacement

Battery Installation

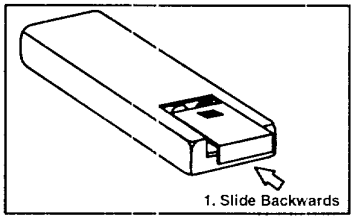
Batteries: Use two "AA" dry cell batteries as supplied.



1. Turn the transmitter upside down. To open cover, press down and slide forward.



2. Install the batteries as shown in the battery compartment. (Polarity (+) and (–) of the batteries must be correct).



3. Replace the cover until the lock snaps.

Precaution on Battery Use

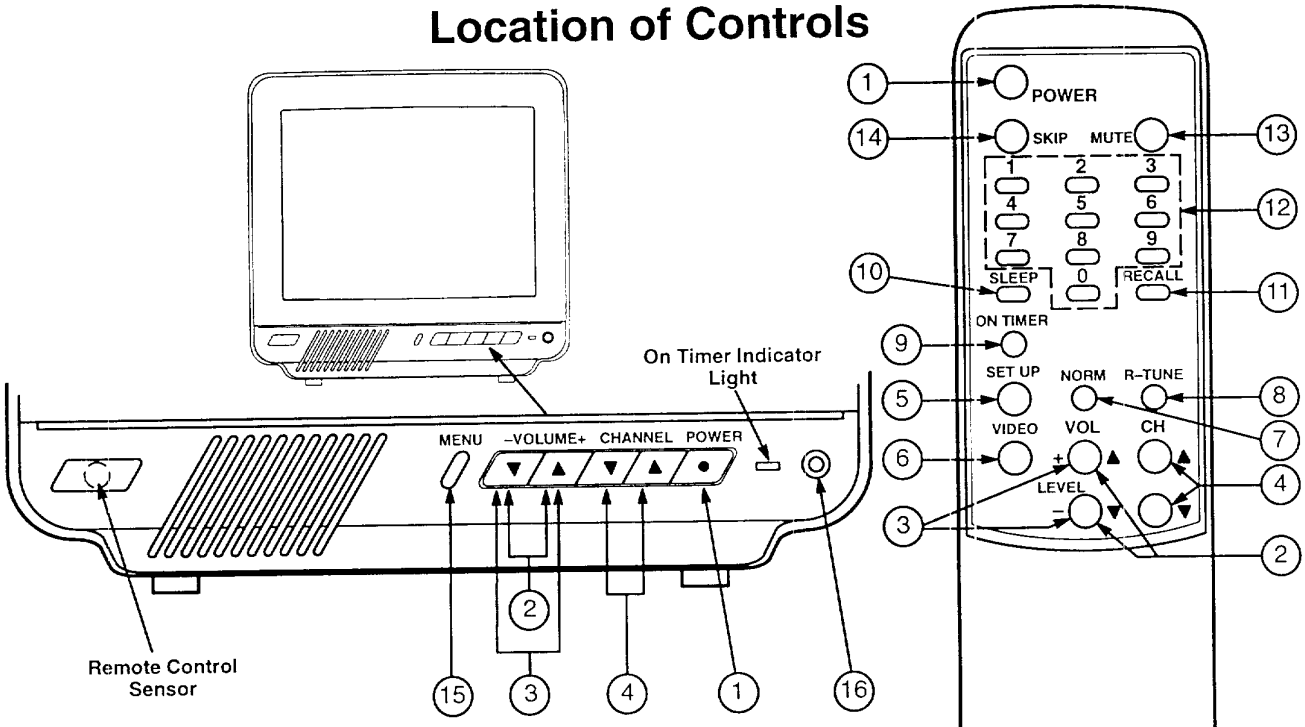
Incorrect installation can cause battery leakage and corrosion that will damage the Remote Control Transmitter.

Observe the Following Precautions

1. Batteries must be replaced as a pair.
2. Do not combine a used battery with a new one.
3. Do not mix battery types (Example: "Zinc Carbon" with "Alkaline").
4. Do not attempt to charge, short–circuit, disassemble, heat, or burn used batteries.

Downloaded from www.Manualslib.com manuals search engine

Location of Controls



Quick Reference Control Operation

(1) **Power Button** – Press to turn ON. Press again to turn OFF.

(2) **Volume (Vol) Buttons** – Press the VOLUME (VOL) ▲ button to increase sound level. Press the VOLUME (VOL) ▼ button to decrease sound level.

(3) **Level (+) and (–) Buttons** – Press to adjust Video, Set Up and On Timer Menus, when displayed.

(4) **Channel (Ch) Buttons** – Press the CHANNEL (CH) ▲ button to select the next higher programmed channel. Press the CHANNEL (CH) ▼ button to select the next lower programmed channel.

(5) **Set Up Button** – Press the SET UP button to display Set Up Menus:
- Initiate Auto Channel Programming
- Program Channel Memory
- Select TV/ANT or Cable Tuning System
- Set Clock

(6) **Video Button** – Press the VIDEO button to display Video Adjustment Menus. Use to adjust Color, Tint, Brightness, Picture, and Sharpness.

(7) **Norm (Normalize) Button** – Press the NORM (NORMALIZE) button while any Video Adjustment Menu is displayed. Adjustments will automatically set to a factory preset level.

(8) **R–Tune (Rapid Tune) Button** – Press to alternately switch between the last two channels selected.

(9) **On Timer Button** – Press to display On Timer Menu. This feature allows turn ON at a predetermined time and channel.

(10) **Sleep Button** – Press the SLEEP button to select automatic turn OFF in 30, 60 or 90 minutes.

(11) **Recall Button** – Press the RECALL button to display:
- Time of Day (if clock is set) or status of Sleep Timer
- Channel Number

(12) **Channel Keyboard "0 through 9" Buttons** – Press desired channel number to access any programmed or unprogrammed channel.

(13) **Mute Button** – Press the MUTE button to mute sound. A second press will return sound to its previous level.

(14) **Skip Button** – Press the SKIP button to choose 30, 60 or 90 seconds, then select any other channel(s). When the time elapses you will automatically return to the original channel.

(15) **Menu Button** – Press the MENU button to access both Video and Set Up Menus.

(16) **Earphone Jack** – Plug in an optional earphone for private monitoring of sound.

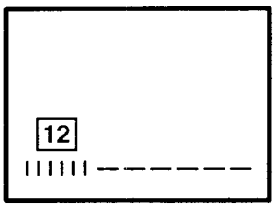
Downloaded from www.Manualslib.com manuals search engine

Control Operation

① Power Button

Press the POWER button to turn ON. Press again to turn OFF. Channel and volume level will be the same as when last turned off. Channel number and time (when clock is set) will be displayed when the Receiver is first turned on.

② Vol (Volume) Buttons



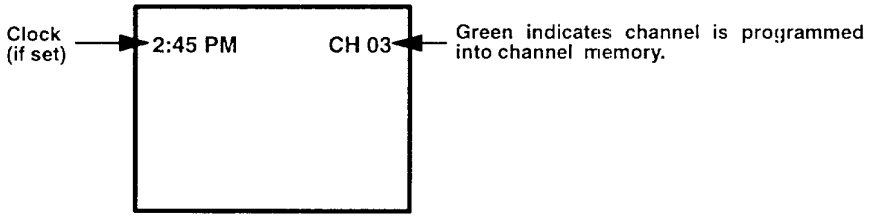
Press the VOL (VOLUME) ▲ button to increase volume or press the VOL (VOLUME) ▼ button to decrease volume. An On–Screen display will indicate volume level.

③ Level (+) and (–) Buttons

The LEVEL buttons are used in conjunction with the Video, Set Up and On Timer Menus. Once a display is On Screen the LEVEL (+) and (–) buttons are used to make the desired adjustment.

④ Ch (Channel) Buttons

Press the CH (CHANNEL) ▲ or ▼ buttons to sequentially select only those channels programmed in memory. Channel number and time (when clock is set) will display for each channel selected.

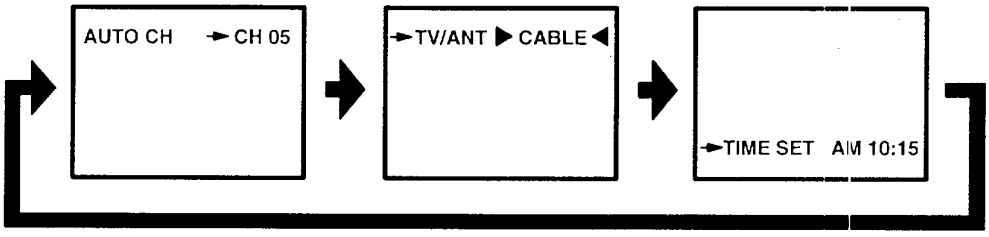


- The TV/VIDEO button must be set to the TV position.
- The TV/ANT–CABLE Menu must be set for the type of signal at the antenna input. Select TV/ANT for off air signals or CABLE for cable signals.
- All channels will be available when there are no channels programmed in memory (indicated by Yellow channel numbers).
- Only programmed channels will be selected when two or more channels are programmed in memory (indicated by Green channel numbers).
- Non–programmed channels can be selected anytime with the Remote Control Keyboard "0"–"9" buttons.

⑤ Set Up Button

The SET UP button is used to display a number of On Screen Set Up Menus that allow the viewer to select the following features:

- Auto Channel Programming
- Program Channel Memory
- Select TV/ANT or Cable Tuning System
- Set Clock

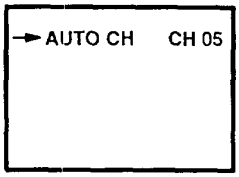


NOTE: Prolonged power interruption will result in the loss of Set Up feature adjustments.

Downloaded from www.Manualslib.com manuals search engine

Auto Channel Programming

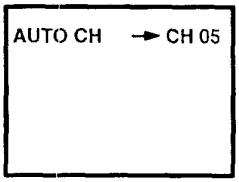
This feature automatically scans through all TV channels. It will add to channel memory any channel with a signal present. The channel numbers will be displayed in Green. Make sure TV/ANT–CABLE Menu is set properly for the TV signal system you have.



1. Press the SET UP button. A Set Up Menu will display On Screen.
2. Press the SET UP button repeatedly until the arrow points to AUTO CH.
3. Press the LEVEL (+) button. Auto channel programming feature starts. To defeat once started, press ANY OTHER button and the feature stops with all previously added channels programmed into channel memory.

Add/Erase Channels From Memory

- Make sure TV/ANT–CABLE Menu is set properly for the TV signal system you have.
- Channels added to memory will be tuned when using CHANNEL ▲ or CHANNEL ▼ button.
- Channels erased from memory will be skipped when using CHANNEL ▲ or CHANNEL ▼ buttons.

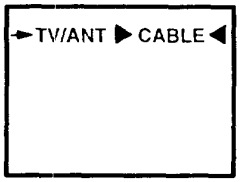


1. Press the SET UP button. A SET UP Menu will display On Screen.
2. Press the SET UP button repeatedly until the arrow points at channel number display.
3. Select a preferred channel while the menu is On Screen. Use CHANNEL ▼/▲ button or use Keyboard "0 through 9" buttons.

   NOTE: A channel displayed in Yellow indicates the channel is not programmed into channel memory. A channel displayed in Green indicates the channel is programmed into channel memory.
4. Press the LEVEL (+) button to ADD a channel when channel number is displayed in Yellow.
5. Press the LEVEL (–) button to ERASE a channel when channel number is displayed in Green.

TV/ANT–Cable Tuning

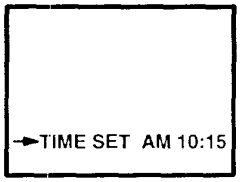
This feature allows the viewer to choose the proper tuning system for the type of signal at the antenna input.



1. Press the SET UP button repeatedly until the TV/ANT–CABLE Menu appears.
2. Press the LEVEL (+) or (–) button to activate the proper tuning system. The selected tuning system will appear in Red.

- TV/ANT is used when not connected to a Cable TV System, for example, when using a VHF/UHF antenna (Channels 02–69).
- CABLE is used when connected to a Cable TV System and you are not using a cable company converter box (Channels 01–99).
- Some Cable TV Systems encode (scramble) program material on specific channels. A cable company supplied decoder is required to reproduce an acceptable picture.
- Certain Cable TV Systems severely offset some channels to reduce interference. It will be necessary to use the cable company supplied converter to receive these specific channels.
- This Receiver automatically selects the correct CATV mode (STD–HRC–IRC) for the type of cable system in use. This feature operates each time channel change occurs. Changing signal sources at the antenna input terminals without changing channels may cause the unit to tune off channel. Re–accessing the desired channel will allow the tuner to select the correct frequency and lock on channel.

Setting Clock Time

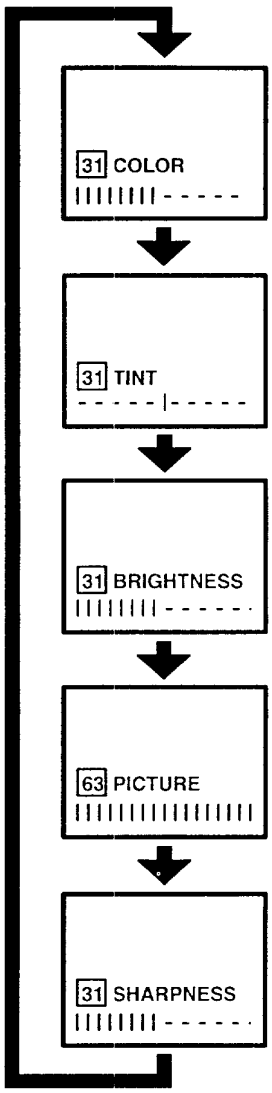


1. Press the SET UP button repeatedly until TIME SET Menu appears and CLOCK HOURS position is in Red.
2. Press the LEVEL (+) button to advance hours. Press the LEVEL (–) button to reverse hours. Set AM or PM hours accordingly.
3. Press the SET UP button again. CLOCK MINUTES position is in Red. Press the LEVEL (+) button to advance minutes. Press the LEVEL (–) button to reverse minutes.

Downloaded from www.Manualslib.com manuals search engine

⑥ Video Button

- COLOR – adjust for desired color intensity.
- TINT – adjust for natural flesh tones.
- BRIGHTNESS – adjust so that dark areas of picture just become black for a crisp detail.
- PICTURE – adjust whitest parts of picture to your preference.
- SHARPNESS – adjust for best clarity of outline detail and/or to reduce effects of noise interference in picture.



To Adjust

1. Press the VIDEO button to display a Video Adjustment Menu.
2. Each additional press of the VIDEO button will select a different video function.
3. Press or Hold the LEVEL (+) or (–) button to adjust function. Adjustment scale and setting indicator number will display On Screen. Use to establish a desired level.

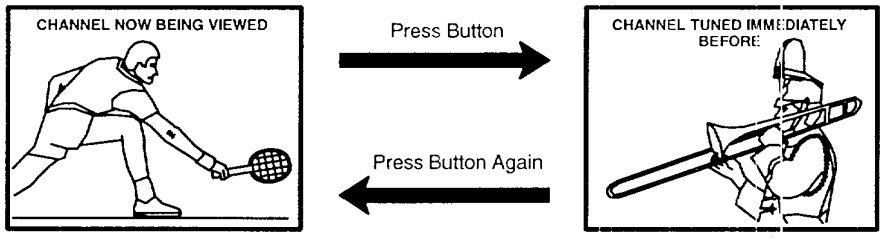
NOTE: Press – adjustment is made in small increments with each press.
Hold – adjustment is continuous until button is released.

4. Adjust each function to your own preference or you may select a factory preset level by pressing the NORM (NORMALIZE) button while any of the Video Adjustment Menus are displayed.

⑦ Norm (Normalize) Button

Press the NORM (NORMALIZE) button while any Video Adjustment Menu is displayed. Adjustments will automatically set to a factory preset level.

⑧ R–Tune (Rapid Tune) Button



This feature allows the viewer to switch between the current channel and the last channel viewed. The switching is instantaneous without passing through any intermediate channels and no On Screen displays are activated.

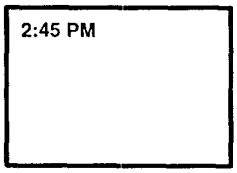
- This feature will not operate if the same channel number is entered twice in succession.

Downloaded from www.Manualslib.com manuals search engine

⑨ On Timer Button

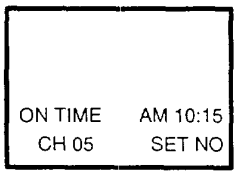
Press the ON TIMER button to view status of the On Timer Menu. This menu may be programmed for any desired turn on time and channel within a 24 hour period.

IMPORTANT NOTE: CLOCK MUST FIRST BE SET BEFORE THIS FEATURE CAN BE USED. Clock setting can be confirmed when the time display appears on screen during initial turn on or channel change.

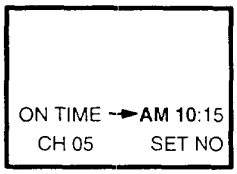


To Program On Timer Menu:

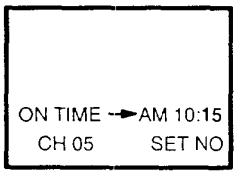
1. Press the ON TIMER button to display On Timer Menu.

1.


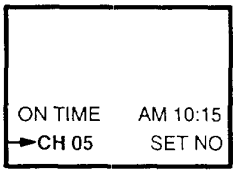
2. Press the ON TIMER button repeatedly to advance cursor (→) to ON TIME hours position and it will display in Red. Use LEVEL (+) or (–) button to set hours AM or PM.

2.


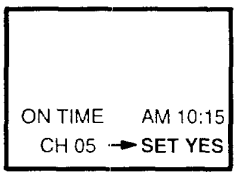
3. Press the ON TIMER button to advance to MINUTES position and it will display in Red. Set minutes with the use of LEVEL (+) or (–) button.

3.


4. Press the ON TIMER button to advance cursor to CH position and it will display in Red. Press LEVEL (+) or (–) button until the desired channel number is displayed. (Only channels programmed into Channel Memory are available.)

4.


5. Press the ON TIMER button to advance cursor to SET position. Each press of LEVEL (+) or (–) button selects YES or NO. Select YES if you want to activate the ON TIMER feature (On Timer indicator will light). Select NO if you do not want to activate the ON TIMER feature.

5.


Special Conditions Affecting On Timer

- The ON TIMER feature must be reset each time it is desired.
- After initial turn ON by the ON TIMER feature, turn OFF will automatically occur in 90 minutes unless any button is pressed.
- Turn ON prior to ON TIMER feature activation will cause the channel designated by the On Timer Menu to be tuned at the programmed time.

Downloaded from www.Manualslib.com manuals search engine

⑩ Sleep Button

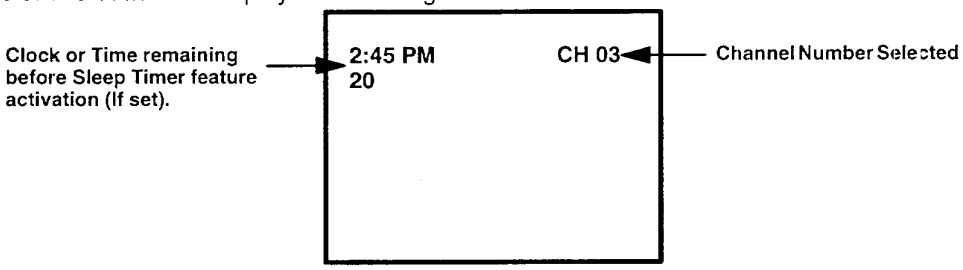
This feature automatically shuts off power after a predetermined time lapse of 30, 60 or 90 minutes.

1. Press the SLEEP button once to set the Sleep Timer for 30 minutes as displayed On Screen.
2. Press the SLEEP button twice to set the Sleep Timer for 60 minutes as displayed On Screen.
3. Press the SLEEP button three times to set the Sleep Timer for 90 minutes as displayed On Screen.
4. Press the SLEEP button continuously until the display reads 0 to deactivate the Sleep Timer.

- Display will flash 3, 2 and 1 to indicate the last three remaining minutes prior to turn off. This allows the viewer to reset or deactivate this function before shut off.
- After Sleep Timer is set, use the RECALL button to find out the time that remains prior to automatic turn off. A press of the SLEEP button while Sleep Timer function is active will reset the timer clock to the next higher 30 minute interval.

⑪ Recall Button

A press of this button will display the following:



⑫ Channel Keyboard "0 through 9" Buttons

Press two keys to access any programmed or unprogrammed channel. Example: "0" and "5" for channel 5.

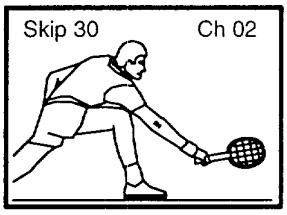
- Audio will mute when a channel with weak or no signal is selected.
- Second number must be pressed within 2 seconds of the first entry or channel will change to that of the first number entered.
- The current channel will remain on when an invalid channel number is entered. (Example: Channel 70 while in the TV/ANT mode).
- The RECALL button may be used at anytime to display the current channel.

⑬ Mute Button

Press the MUTE button to mute sound immediately. "MUTE" will display for a few seconds. Press again and sound will be restored to same level as before muting. Display of volume level adjustment will appear.

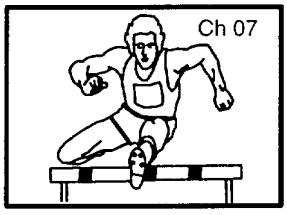
⑭ Skip Button

This feature allows the viewer to temporarily select other channels and automatically returns to the original channel after a predetermined time period.

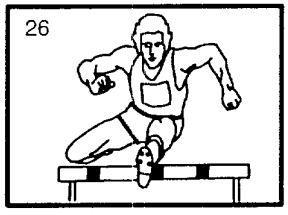


1. Press SKIP button.

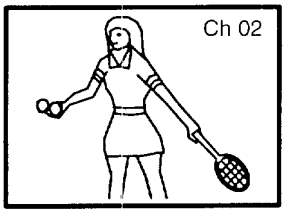
Once for 30 seconds.
Twice for 60 seconds.
Three times for 90 seconds.
Four times to deactivate feature.



2. Select any other channel or channels.



3. Channel number disappears, then Skip Timer will appear and count down.



4. Automatically returns to original channel when time elapses.

Downloaded from www.Manualslib.com manuals search engine

(15) Menu Button

The MENU button will allow the viewer to access all Video and Set Up Menus.

Press the MENU button repeatedly to display:

The Video Menus

- Color
- Tint
- Brightness
- Picture
- Sharpness

The Set Up Menus

- Auto Channel Programming
- Program Channel Memory
- TV/ANT–Cable Selection Menu
- Set Clock

Use the LEVEL (+) and (–) buttons to adjust or activate features as desired.

(16) Earphone Jack

Located on the front control panel is an Earphone Jack for use with an optional earphone. Insertion of the earphone plug automatically cuts–off the TV speaker for personal listening. This jack accepts an earphone with an 1/8" mini plug.

Downloaded from www.Manualslib.com manuals search engine

Care and Cleaning

Picture Tube (Turn set off)

Use a mild soap solution or window cleaner and a clean cloth. DO NOT USE ABRASIVE CLEANERS. Avoid excessive moisture . . . wipe dry.

Plastic Cabinets

Wipe the cabinet with a soft cloth dampened with water or a mild detergent solution, then wipe dry with a soft clean cloth. Avoid excessive moisture. Do not use benzene, thinners or other petroleum based cleaners.

Wood Cabinets

When dusting or polishing the cabinet, use a clean soft cloth and stroke straight with the grain. An occasional coat of furniture polish will help preserve the finish. Do not use benzene, thinners or other petroleum based cleaners. Do not place objects made of plastic or rubber directly on top of the cabinet . . . a chemical reaction could result causing permanent marring of the finish.

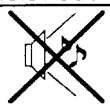
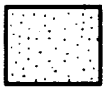
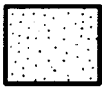
Remote Control Transmitter

Do not use benzene, thinners or other petroleum based cleaners to clean the Remote Control Transmitter. To clean, wipe with a soft cloth slightly moistened with a mild detergent and then wipe dry with a soft clean cloth.

Downloaded from www.Manualslib.com manuals search engine

Troubleshooting Chart

Before you call for service, determine the symptoms and make a few simple checks shown below.

Symptoms		Check
Picture	**Sound**	
SNOWY PICTURE	NOISY SOUND	– ANTENNA LOCATION AND/OR CONNECTION
MULTIPLE IMAGE	NORMAL SOUND	– ANTENNA DIRECTION AND/OR LOCATION – ANTENNA LEAD–IN WIRE
INTERFERENCE	NOISY SOUND	– ELECTRICAL APPLIANCES, LIGHTS, CARS AND TRUCKS – DIATHERMY AND OTHER MEDICAL EQUIPMENT
NORMAL PICTURE	 NO SOUND	– VOLUME CONTROL SETTING – MUTE CONTROL (IF APPLICABLE) – TV SPEAKER SWITCH (IF APPLICABLE) IN OFF OR EXT POSITION – TRY ANOTHER CHANNEL
 NO VIDEO	NOISY SOUND	– TV/ANT–CABLE MENU IS SET IMPROPERLY FOR THE TV SIGNAL SYSTEM CONNECTED TO ANTENNA INPUT.
NO PICTURE	NO SOUND	– CHECK THAT AC POWER LINE IS PLUGGED INTO AC OUTLET AND POWER BUTTON IS ON – BRIGHTNESS & AUDIO CONTROLS SET PROPERLY – TRY ANOTHER CHANNEL – TV/VIDEO BUTTON IN CORRECT POSITION (IF APPLICABLE)
NO COLOR	NORMAL SOUND	– COLOR CONTROL SETTINGS – TRY ANOTHER CHANNEL
 NO VIDEO	NO SOUND	– CHANNEL SELECTED HAS WEAK OR NO SIGNAL, TRY ANOTHER CHANNEL.

Should this unit fail to operate, turn it OFF, unplug the AC cord, and contact your Authorized Servicer for repairs.

Downloaded from www.Manualslib.com manuals search engine

Notes:

Downloaded from www.Manualslib.com manuals search engine

Panasonic Company
Division of Matsushita Electric
Corporation of America
One Panasonic Way
Secaucus, New Jersey 07094

Panasonic Company (West)
of America
Division of Matsushita Electric
Corporation of America
6550 Katella Ave.
Cypress, CA 90630

Matsushita Electric
of Canada Limited
5770 Ambler Drive
Mississauga, Ontario L4W 2T3
Canada

Panasonic Sales Company
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park
Carolina, Puerto Rico 00630

Downloaded from www.Manualslib.com manuals search engine